

## DETECTION OF GAS PHASE MATERIALS

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Abstract of the Invention

Sensors and methods of monitoring for the presence of gas phase materials by detecting the formation of films based on the gas phase material are disclosed.

Advantageously, some gas phase materials preferentially deposit on specific surfaces.

10 As a result, selective detection of those gas phase materials can be obtained by detecting films deposited on those detection surfaces. Examples of gas phase materials that may be detected include  $\text{RuO}_4$ ,  $\text{IrO}_4$  and  $\text{RhO}_4$ .

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